

Towards Developing a Courseware for Physical Education: Methods and Implementation

A master project submitted to the Graduate School
in partial fulfillment of the requirements for the
degree of Masters of Science (Information and
Communication Technology)

University Utara Malaysia

By

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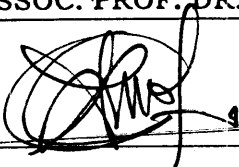
**TOWARDS DEVELOPING A COURSEWARE FOR PHYSICAL EDUCATION:
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IKHTISAR

Projek ini memberi fokus kepada kaedah dan pembangunan perisian multimedia yang dipanggil *Interactive-Learning for Physical Education* (InteL-PE). Perisian ini dihasilkan mengikut *Pragmatic Model* yang telah dibangunkan oleh Carswell dan Murphy (1995). Model ini dipilih khas disebabkan oleh langkah-langkahnya yang ringkas dan mudah. Perisian ini yang memberi tumpuan kepada satu tajuk yang diambil daripada Sukatan Pendidikan Jasmani dan Kesihatan (PJK) Tingkatan Lima, menggunakan gabungan teks, video, audio, dan animasi; dihasilkan sebagai bahan bantu mengajar kepada guru-guru dan bahan bantu belajar kepada para pelajar. Projek ini memberi tumpuan kepada PJK disebabkan oleh kekurangan penerimaan dan kredibiliti yang ketara terhadap subjek ini dalam senario pendidikan di Malaysia, walaupun ia satu subjek teras. Satu siri penilaian telah dijalankan terhadap InteL-PE dan dapatan penilaian telah menunjukkan ia boleh dijadikan satu cara untuk memotivasikan para pelajar dan sebagai satu kaedah mengajar yang baru, dan boleh memberi kepelbagaian bahan bantu mengajar kepada guru-guru terutama sekali guru bukan opsyen yang mengajar PJK di sekolah-sekolah di Malaysia.

ABSTRACT

This project focuses on the methods and development of a multimedia courseware called the Interactive-Learning for Physical Education (Intel-PE). This courseware was produced according to the Pragmatic Model developed by Carswell and Murphy (1995). This particular model was chosen due to its apparently straightforward steps. This courseware, which concentrates on a topic taken from the Malaysian Form Five Physical and Health Education (Pendidikan Jasmani dan Kesihatan or PJK) syllabus, uses the combination of texts, video, audio, and animation; produced as teaching aids for teachers and learning aids for students. It focuses on PJK because of the apparent lack of acceptance and credibility of the subject in Malaysian education scenario despite being a core subject. A series of evaluation have been conducted for Intel-PE and the findings showed that the courseware can be used to motivate students, and as a new teaching methodology that can provide teaching aid variety to teachers especially non-option teachers teaching PJK in Malaysian schools.

ACKNOWLEDGEMENT

The development and production of the IntelL-PE has not been an easy process having been beset by doubts as to the enormity of the task from own lack of experience to the acceptability of the courseware to the lack of readily available resource. Thanks to the many people involved however, progress has never been slow. From the inception of idea to the actual production, the project has not been a solitary effort.

A special thank you to my project supervisor, Associate Professor Dr. Zulikha Bt. Jamaluddin for her patience, encouragement, and understanding in sharing her knowledge with me. Her perseverance has enhanced my knowledge and enabled me to produce this courseware.

Thank you to the Malaysian Ministry of Education and Kedah Education Department respectively for the permission granted for the implementation stage of the project. Thank you also to all the respondents whose frank evaluation of the courseware made up the bulk of the study. I am grateful to the officers at the Kedah State Educational Resource Center shared their technical knowledge with me. The Center is also to be thanked for allowing me the use of its video archive. My friend Noora Murni read and edited the final draft of the report.

Finally, a very special thanks to my family, especially my husband Dzul Bahar Bin Ahmad, my children, Izzul Syahmi, Izzati Afiah and Izzana Saffiya who tolerated my absences, and beloved mother Che Jam Bt. Md. Noor, without whose love and support, I would not have been able to finish this project.

TABLE OF CONTENTS

	Page
PERMISSION TO USE	i
IKHTISAR	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Problem Statement	3
1.1.1 Study of Method	4
1.2 Project Objective	7
1.3 Scope	7
1.4 Significant of Study	8
1.5 Report Structure	8
CHAPTER TWO: LITERATURE REVIEW	10
2.1 PJK in Malaysian Situation	11
2.2 Multimedia in Education	12
2.3 Physical Education and Technology	12
CHAPTER THREE: METHODOLOGY	14
3.1 Stage 1: Problem Definition	15
3.2 Stage 2: Courseware Specification	16

3.3	Stage 3: Courseware Design	18
3.4	Stage 4: Implementation	23
3.5	Stage 5: Evaluation	23
3.5.1	Instruments	24
	CHAPTER FOUR: DATA ANALYSIS	25
4.1	Statistics of Respondents' Demographic Information	25
4.2	Statistics of Respondents' Perception of Perceived Ease of Use	27
4.3	Statistics of Respondents' Perception of Perceived Usefulness	30
4.4	Significant Strengths and Weakness	33
4.5	Conclusion	33
	CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS	37
5.1	Conclusions	37
5.2	Constrains	38
5.3	Recommendation	39
	REFERENCES	40
	APPENDICES	
	APPENDIX A - Perceived Usefulness and Ease of Use	
	APPENDIX B - IntelL-PE Questionnaire (Bahasa Melayu)	
	APPENDIX C - Malaysian Ministry of Education and Kedah Education Department (Permission Letter)	
	APPENDIX D - Interface IntelL-PE	

LIST OF TABLES

	Page
Table 3-1 Comparison between traditional PJK teaching and IntelL-PE	17
Table 3-2 The Media Selection	19
Table 4-1 Response frequency and percentage for teaching experience	26
Table 4-2 Response frequency and percentage for option	27
Table 4-3 Statistics of respondents' perception of perceived ease of use	28
Table 4-4 Descriptive Statistics of respondents' perception of perceived ease of use	29
Table 4-5 Statistics of respondents' perception of perceived usefulness	31
Table 4-6 Descriptive Statistics of respondents' perception of perceived of usefulness	32

LIST OF FIGURES

	Page
Figure 3-1 The Pragmatic Model by Carswell and Murphy (1995)	15
Figure 3-2 Improvisation of The Pragmatic Model	15
Figure 3-3 Authorware Flow-line Chart for Intel-PE	19
Figure 3-4 Flow-line Chart for one of the Main Menu (Definition)	20
Figure 3-5 Intel-PE Flow-line for Introduction	20
Figure 3-6 Interface of Intel-PE	21
Figure 3-7 Intel-PE Flow-line from Main Menu	22
Figure 4-1 Graphic representation of Table 4-1	26
Figure 4-2 Graphic representation of Table 4-2	27
Figure 4-3 Graphic representation of Table 4-3	30
Figure 4-4 Graphic representation of Table 4-4	32

LIST OF ABBREVIATIONS

ICT	Information and Communication Technology
PUEU	Perceived Usefulness and Ease of Use
PE	Physical Education
PJK	Pendidikan Jasmani dan Kesehatan
SPSS	Statistical Package for the Social Sciences
CAL	Computer Assisted Learning
CALL	Computer Aided Language Learning
Intel-PE	Interactive Learning for Physical Education
CD	Compact Disk
CD-ROM	Compact Disk – Read Only Memory
PC	Personal Computer
VCD	Video Compact Disk
ISD	Instructional Systems Development
MB	Mega Byte
RAM	Random Access Memory

CHAPTER 1

INTRODUCTION

At present, the education field is exposed to the technology and sophistication of the computer age. This situation demands pedagogical and methodological changes in the education curriculum. According to Falsafah Pendidikan Kebangsaan (2001) the implementation of the school curriculum emphasizes the effective and applicable learning strategy with the present educational and future needs.

Nixon and Jewett (1975) said that the body of knowledge in Physical Education (known in Malaysia as Pendidikan Jasmani dan Kesihatan or PJK for short) comprise of components such as history, physical education philosophy, sports sociology, dance, and physical activities. Actually, PJK is a very important subject because it is a core subject in the Malaysian school curriculum. It is unfortunate however, that school administrators in general are more often than not, focused on examination (and therefore perceived to be the only important) subjects.

Hence, PJK in Malaysia, is chosen because it is a unique subject (comprising the cognitive, psychomotor, and affective domains), which is a life-long education. The focus on the multimedia itself contributes so much to the advantages and the benefits of education.

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